United States Patent [19]

Volk

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[54] **ACCOMMODATING INTRAOCULAR LENS AND LENS SERIES AND METHOD OF LENS SELECTION**

[76] Inventor: **David Volk**, 3336 Kersdale Rd., Pepper Pike, Ohio 44124

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[52] **U.S. Cl.** **623/6**; 351/161

[58] **Field of Search** 623/6; 351/160, 161

[56] **References Cited**

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"Problems and Compromises in the Design of Aspheric Cataract Lenses", by John K. Davis, American Journal of Optometry and Archives of American Academy of Optometry, vol. 36, No. 6, Jun. 1959, pp. 279–288.

Primary Examiner—Ronald L. Frinks

Attorney, Agent, or Firm—Baldwin, Egan, Hudak & Fetzer

[57] **ABSTRACT**

This invention relates to an improved aspheric posterior chamber intraocular lens and lens series of said novel intraocular lens, which lens is used as a replacement within the eye for the absent human crystalline lens, and a simplified method of selecting a lens from said lens series for use in a given eye. The novel lens of this invention is designed to have a continuously and regularly increasing refractive power from its axis peripheralward in its optically active area and to achieve the following results: the correction of the axial refractive error of the aphakic eye in which it is placed, and the production of clear central vision over a continuous range of distances from far to near, where far is defined as six meters and beyond, and near or reading distance is defined as generally 40 cm from the eye but may be as close as 33 cm.

15 Claims, 9 Drawing Figures